

## ADDITIONAL FEE

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## **REMARKS**

Applicants respectfully request reconsideration and allowance of this application in view of the following comments.

At the outset, Applicants wish to address the showing required by 37 CFR § 1.116(b) as to why this amendment is necessary and was not presented earlier. This amendment is responsive to new points made in the final rejection, and, therefore, is necessary. Further, since this is the first substantive response to the final rejection, this amendment could not have been presented earlier. In view of the foregoing, Applicants submit that a proper showing has been made, and, therefore, that the Examiner should enter and consider this amendment. An early notice that this amendment has been entered and considered is earnestly solicited.

Claims 1, 3-5 and 9-14 were finally rejected under 35 USC § 102(e) as being anticipated by or, in the alternative, under 35 USC § 103(a) as being obvious over Wilson, III ("Wilson"), U.S. Patent No. 6,063,633. In response, Applicants respectfully request that the Examiner reconsider and withdraw this rejection.



Applicants do not believe that the Examiner has made out a *prima facie* case of anticipation. There is absolutely no precedent in the applicable law for what the Examiner does here, i.e., *go outside* of the cited reference and find that a claim element is anticipated in view of uncited, allegedly common knowledge. This is untenable.

The Examiner only partially deals with Applicants' previous arguments. On the issue of anticipation, Applicants cited *In re Robertson*, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999), for the proposition that anticipation requires that every claim element be found, either expressly or inherently described, *in a single prior art reference*. See the first full paragraph on page 6 of the amendment dated June 25, 2002. Applicants then pointed out that the Examiner already had conceded that Wilson *did not expressly teach* recording a difference image that corresponds to a subtraction of the infrared emission recorded prior to the beginning of the processes from the infrared emission recorded during the course of the processes. See the paragraph bridging pages 6-7 of that same amendment. Accordingly, this rejection was *only proper if Wilson inherently taught this feature*. In the first paragraph on page 7 of that amendment, Applicants explained why Wilson did *not* inherently teach this feature since it was *not necessarily* the case that Wilson's disclosure included this feature. (Even assuming for the sake of argument that the Examiner's position about a "small group" is correct, this only confirms that there were other possibilities, and, therefore, Wilson did not inherently describe the feature required according to the instant claims.) Consequently, Wilson could not anticipate the instant claims.



The Examiner nowhere takes issue with this analysis, but, instead, goes outside of Wilson, finding anticipation to lie because persons skilled in the art "would have immediately envisaged the use of a difference image as a means of recording changes in temperature with time." To be sure, the "immediately envisaged" test has been applied in the context of anticipation, for example, in the case of In re Petering et al., 133 USPQ 275 (CCPA 1962), but in all such cases anticipation has been found to lie because the cited reference itself described a narrow generic description from which the species at issue could have been immediately envisaged. In this case, Wilson discloses no such narrow generic description, and, consequently, being silent on this issue, Wilson would not have led persons skilled in the art immediately to envisage the use of a difference image as a means of recording changes in temperature with time.

Respectfully, the Examiner's anticipation analysis is fundamentally flawed. Applicants respectfully request that the Examiner reconsider and withdraw the anticipation aspect of this rejection.

On the issue of obviousness, the Examiner's reliance on allegedly well-known, common knowledge is also presumptively improper. Applicants traverse the Examiner's assertion, and, in accordance with MPEP § 2144.03, respectfully request that, if this rejection is maintained, the Examiner cite a secondary reference supporting his position in the next Office Action or explain why such citation is unnecessary.



Even assuming, for the sake of argument, that the Examiner can cite such a reference, the current record is devoid of any suggestion to use such technique in the context of the present invention with a reasonable expectation of success, and any reference cited by the Examiner must provide the suggestion and reveal the reasonable expectation of success.

Additionally, Applicants ask rhetorically why, if the state of the prior art is as the Examiner contends, the specific technique of recording infrared images at different stages of a reaction, or prior to a reaction, has not been disclosed or implemented prior to the present application? Instead, Applicants have discovered for the first time that using a library plate of low IR-reflectivity is of particular importance in the case of investigating material libraries where many materials with slight differences in catalytic activity and hence in thermal emission are studied simultaneously. Such a normalization may be unnecessary or even costly in view of the time consumption for standard IR thermography measurements on standard probes (i.e., non-libraries). Therefore, Applicants most respectfully disagree with the Examiner's assessment that the difference imaging as presently claimed would have been obvious to persons having ordinary skill in the art.

In view of the foregoing, Applicants submit that the Examiner would be fully justified to reconsider and withdraw this rejection. An early notice that this rejection has been reconsidered and withdrawn is, therefore, earnestly solicited.



Claims 1, 8 and 15 were finally rejected under 35 USC § 112, second paragraph, as being indefinite. In response, Applicants respectfully request that the Examiner reconsider and withdraw this rejection as well.

As stated in MPEP § 2173.05(b):

"The fact that claim language, including terms of degree, may not be precise, does not automatically render the claim indefinite under 35 U.S.C. 112, second paragraph. Acceptability of the claim language depends on whether one of ordinary skill in the art would understand what is claimed, in the light of the specification. [Citations omitted, and emphasis added.]"

Applicants submit that one of ordinary skill in the art would understand perfectly well what is instantly claimed. Therefore, the claims are not indefinite.

The concept of a black body is well known to one skilled in the art of physics as being equivalent to a body with an IR-reflectivity of close to zero. Therefore, an IR-reflectivity "close to the IR-reflectivity of a black body" is in itself clear and concise. Such a reflectivity is found, for example, in materials that are black and dull in their appearance. Therefore, one skilled in the art, in particular an expert in the field of physics and/or material science, would readily understand the claimed invention as being directed to using black dull materials as the materials of choice for the library plate. In the description and in the claims, the use of a slate plate is

given as a specific example of such a black, dull material. However, the present invention is not restricted to slate, but is related to any material with the thermal characteristics of slate, i.e., any material with an IR-reflectivity close to zero, i.e., any material with an IR-reflectivity close to the IR-reflectivity of a black body.

According to the prior art, metals, in particular stainless steel and silicon, are exclusively used as materials for the library plate. Those materials are in opposition to the materials claimed in the present invention. Metals display a particularly high IR-reflectivity and are the opposite to a black body. Silicon is transparent to IR-radiation and, therefore, not suited to black IR-radiation emanating from behind the plate. In summary, the materials according to the prior art are poorly suited for the purpose of materials library testing and do not suggest the use of the thermal difference imaging as used in the present invention.

The effectiveness of the method as claimed in the invention is particularly clear from looking at the examples given in the application. Specifically, it is possible to differentiate the thermal signature stemming from two different enantiomers of the same molecule. Such a result cannot be achieved by using the methods of IR thermography according to the prior art, in particular by the method as disclosed in Wilson.

In view of the foregoing, Applicants submit that the Examiner would be fully justified to reconsider and withdraw this rejection as well. An early notice that this rejection has also been reconsidered and withdrawn is, therefore, earnestly solicited.



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Applicants believe that the foregoing constitutes a bona fide response to all outstanding objections and rejections.

Applicants also believe that this application is in condition for immediate allowance. However, should any issue(s) of a minor nature remain, the Examiner is respectfully requested to telephone the undersigned at telephone number (212) 808-0700 so that the issue(s) might be promptly resolved.

Early and favorable action is earnestly solicited.

Respectfully submitted,

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CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that the foregoing Amendment under 37 KFR § 1.116 and the accompanying Petition for Extension of Time (10 pages total) are being facsimile transmitted to the United States Patent and Trademark Office on the date indicated below:

Date: February 20, 2003

urt G. Brisco